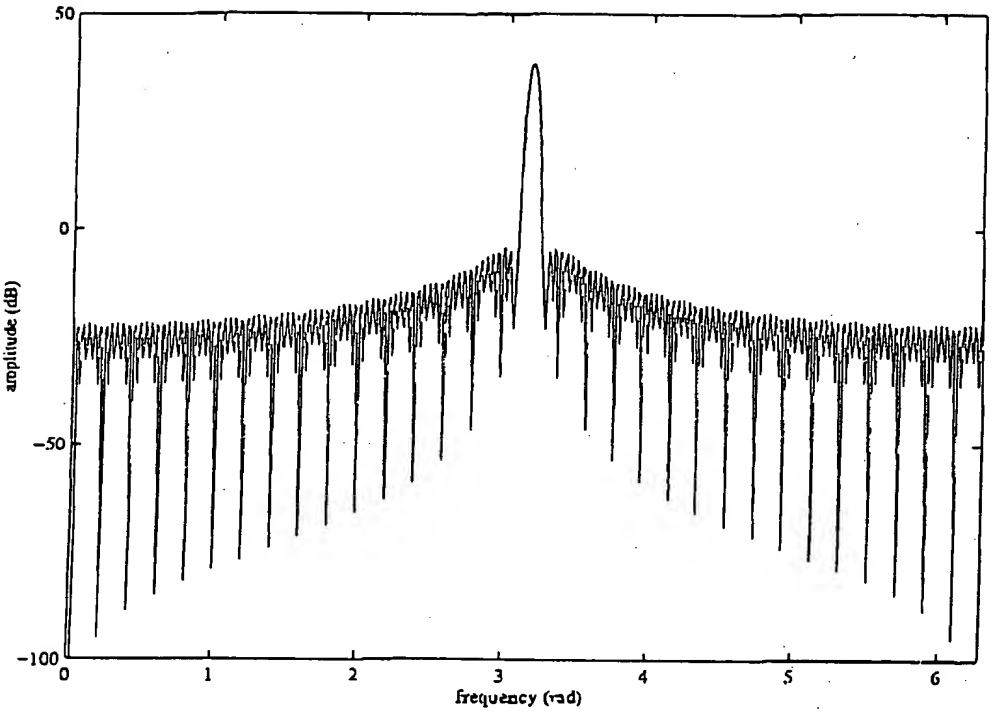

Figure 1

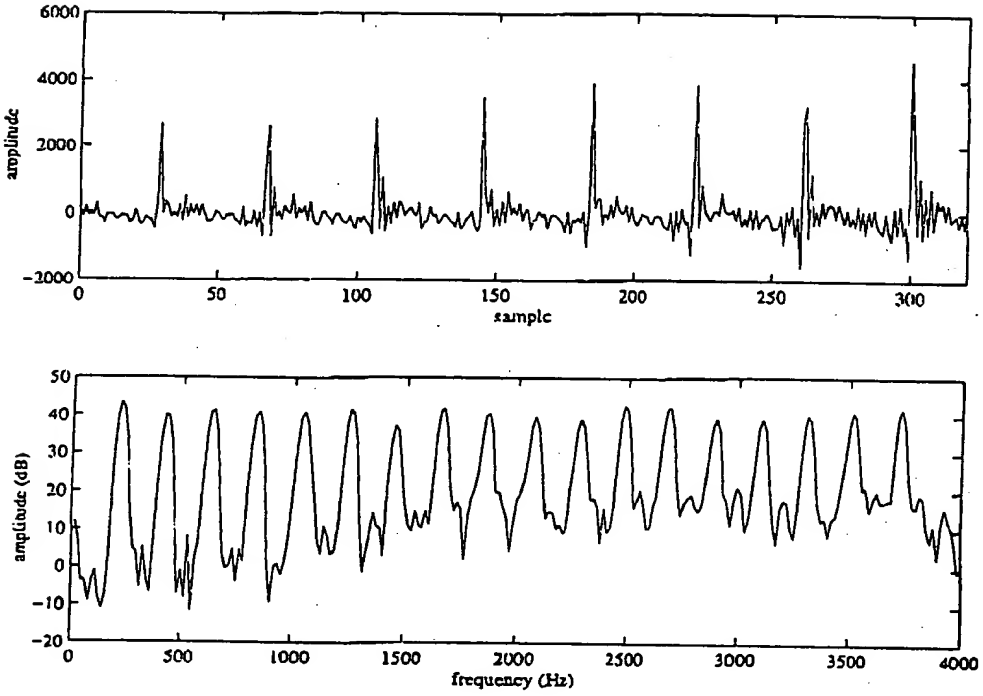
6000
4000
2000
0
-2000
amplitude
0
50
100
150
200
250
300
sample
50
40
30
20
10
0
-10
-20
amplitude (dB)
0
500
1000
1500
2000
2500
3000
3500
4000
frequency (Hz)

Figure 2

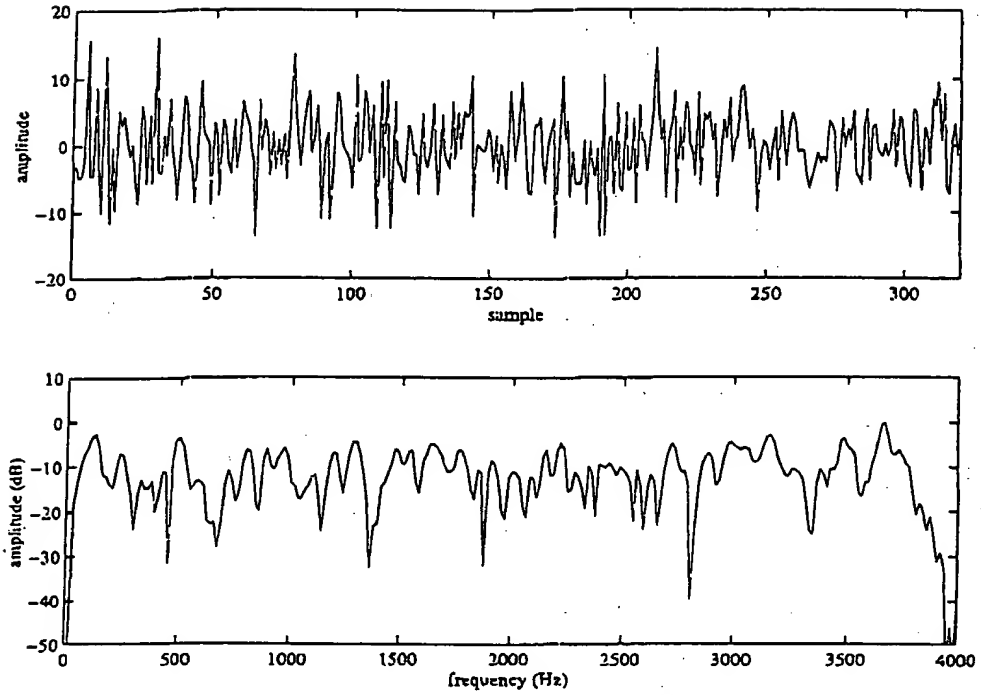

Figure 3

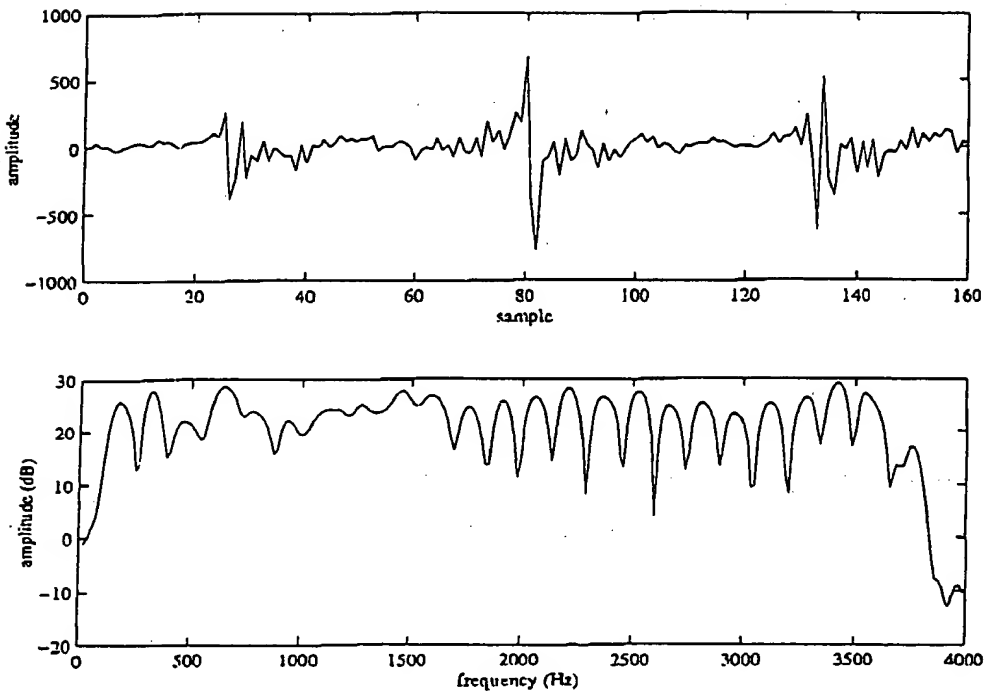
1000
500
0
-500
-1000
amplitude
0
20
40
60
80
100
120
140
160
sample
30
20
10
0
-10
-20
amplitude (dB)
0
500
1000
1500
2000
2500
3000
3500
4000
frequency (Hz)

Figure 4

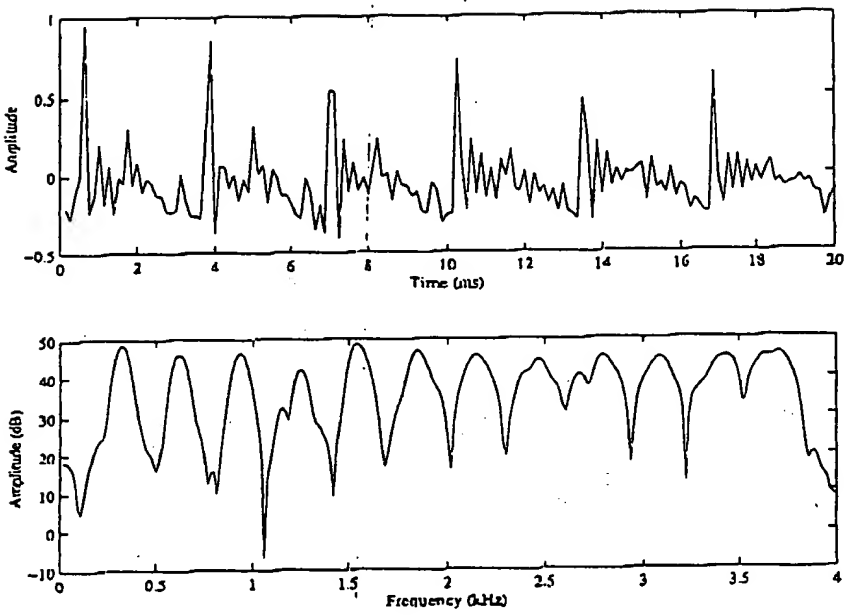

Figure 5

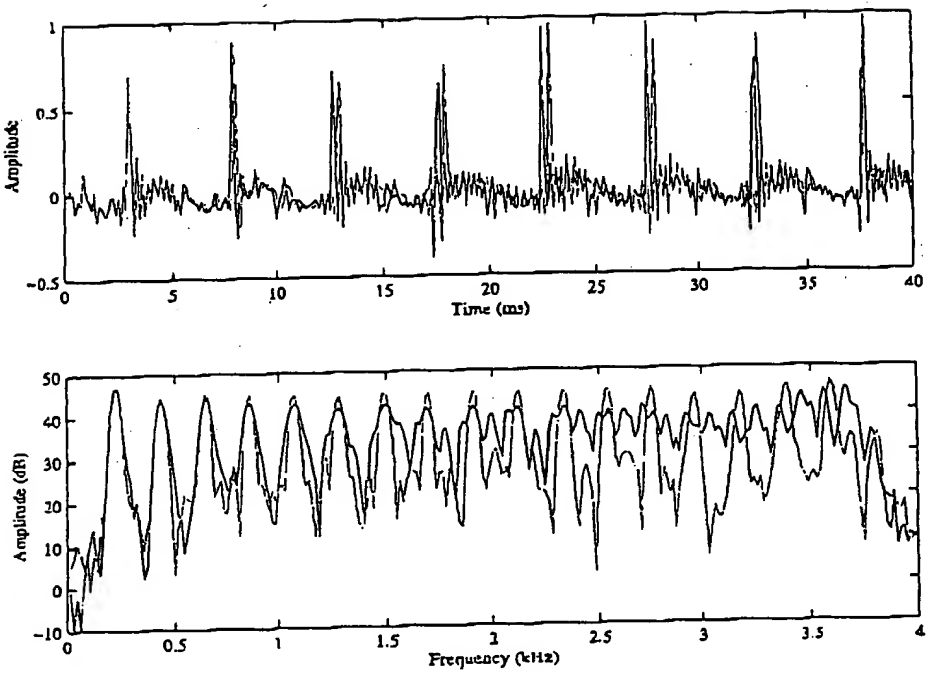

Figure 6a

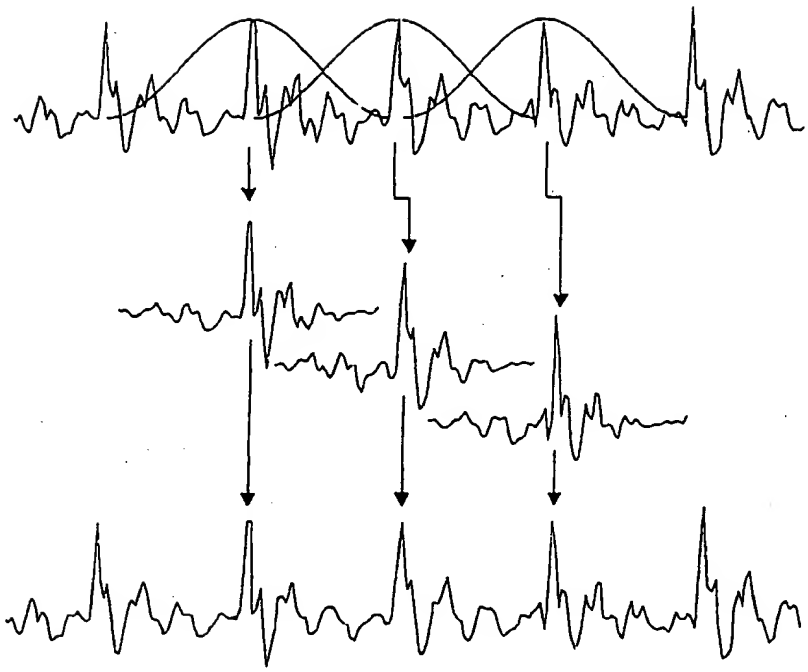

Figure 6b

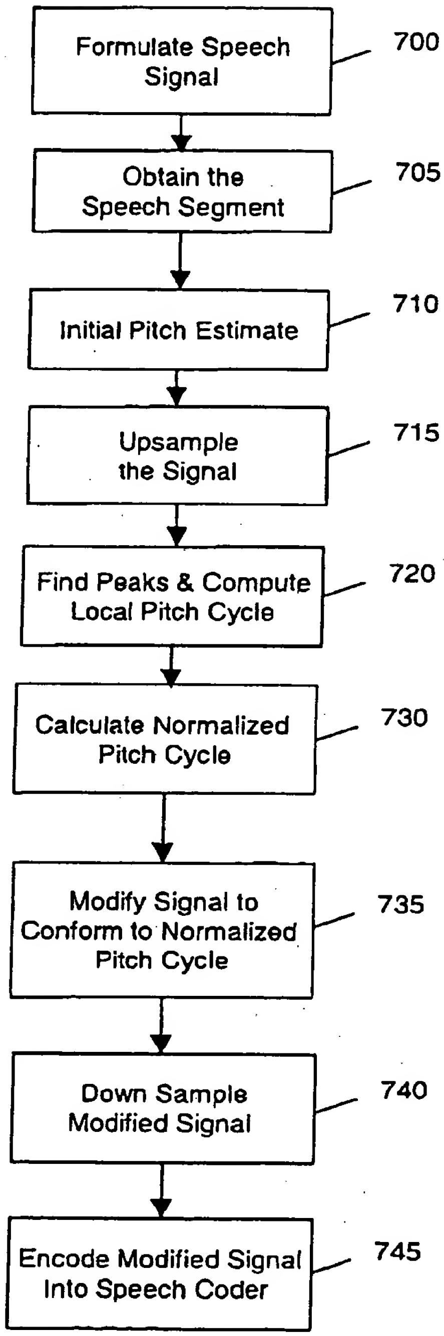
Formulate Speech Signal
700
Obtain the Speech Segment
705
Initial Pitch Estimate
710
Upsample the Signal
715
Find Peaks & Compute Local Pitch Cycle
720
Calculate Normalized Pitch Cycle
730
Modify Signal to Conform to Normalized Pitch Cycle
735
Down Sample Modified Signal
740
Encode Modified Signal Into Speech Coder
745

Figure 7